

### **REMARKS**

1. In response to the Final Office Action mailed March 22, 2007, Applicants respectfully request reconsideration. Claims 20-38 were last presented in the application. In the outstanding Office Action, claims 1-19 were erroneously indicated as being withdrawn (as they were previously cancelled by Applicants' immediately prior Response filed on December 18, 2006) and claims 20-38 were rejected. By the foregoing Amendments, no claims have been cancelled, amended, or added. Thus, upon entry of this paper, claims 20-38 will be pending in this application. Of these 19 claims, 3 claims (claims 20, 25 and 32) are independent.
2. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

#### ***Art of Record***

3. Applicants acknowledge receipt of Form PTO-892 listing additional references considered by the Examiner.

#### ***Claim Rejections Under 35 USC § 102***

4. The Examiner has rejected claims 20, 22, 25, 30, 32, and 37 as being anticipated by U.S. Patent No. 5,016,280 to Engebretson, *et al.* (hereafter "Engebretson"). Applicants respectfully disagree.
5. With regard to independent claim 20, the Examiner asserts that microphone 13 in Engebretson is "configured to provide stimulation to at least one desired section of an auditory nerve to said stimulation thereby obtaining a plurality of discrete values... collectively representing... the evoked neural response." (*See*, Office Action, pg. 2, ¶ 2.) Applicants assert that the Examiner has misapprehended Engebretson.
6. Engebretson discloses an electronic filter for electroacoustical systems such as hearing aids in which it is desirable to reduce or eliminate distortion or squealing caused by feedback. (*See*, Engebretson, col. 1, ll. 29-42.) As depicted in Figure 1 of Engebretson, input microphone 13 receives sounds that are external from the user and provides electrical output representing those sounds to over-the-ear unit 15. Over-the-ear unit 15 in turn provides an electrical output for

receiver/transducer 17, which emits sound into the user's ear via channel 23. As described in Engebretson, various feedback 19, 25 and 29 can undesirably be picked up by input microphone 13, which ultimately leads to the feedback or squealing phenomenon. This feedback phenomenon is being solved using filters as disclosed in Engebretson.

7. Contrary to the Examiner's assertion, microphone 13 in Engebretson is not analogous to Applicants' "first implanted subsystem configured to *provide stimulation to* at least one desired section of an *auditory nerve*, and further configured to successively *sample an evoked neural response* of the auditory nerve" as recited in Applicants' independent claim 20. First, microphone 13 does not "provide stimulation" to the auditory nerve, since it detects ambient sound and provides electrical signals representing the sound for processing by the over-the-ear unit 15. Second, microphone 13 in Engebretson does not "successively sample an evoked neural response of the auditory nerve to said stimulation." Nowhere does Engebretson teach or suggest any implanted subsystem configured to provide stimulation and successively sample an evoked neural response, much less a single component which is capable of doing both stimulating and successively sampling. Therefore, Engebretson fails to disclose, teach or suggest each and every feature of Applicants' invention as recited in independent claim 20. Accordingly, Applicants respectfully request that the rejection of claim 20 be reconsidered and withdrawn.

8. Similarly, with regard to independent claim 25, the Examiner asserts that Engebretson discloses a method of measuring an evoked neural response. The examiner also asserts that Engebretson discloses successively sampling an evoked neural response of the auditory nerve, using a sample and hold circuit 61. (See, Office Action, pg. 3.) As noted above, Engebretson discloses a system for filtering sounds to prevent feedback in hearing aids and other systems. In Engebretson, sample and hold circuit 61 receives analog samples from microphone 13 via anti-aliasing low pass filter (LPF) 59 and outputs analog samples to ADC 63. It does not "successively [sample] evoked neural response of the auditory nerve" since the analog samples are received from microphone 13 which picks up sounds that are outside the user's ear. Therefore, Engebretson does not disclose each and every feature of Applicants' invention as recited in independent claim 25. Accordingly, Applicants respectfully request that the rejection of claim 25 be reconsidered and withdrawn.

9. Similarly, with regard to independent claim 32, the Examiner asserts that Engebretson discloses a device for measuring neural response in a cochlear implant system. The Examiner also asserts that Engebretson discloses a means for sampling the evoked neural response, and asserts that part 17 of Engebretson is that means for sampling. (*See*, Office Action, pg. 3.) As noted above, Engebretson discloses a system for filtering sounds to prevent feedback in hearing aids and other systems. Receiver/transducer 17 of Engebretson receives input from behind-the-ear unit 15 and emits sounds into channel 23 in the user's ear. (*See*, Engebretson, col. 2, ll. 24-25.) Receiver/transducer 17 receives input from behind-the-ear unit 15 and emits sounds to the user's ear, but it does not "successively [sample] the evoked neural response *of the auditory nerve*" as recited in Applicants' claimed invention. Therefore, Engebretson does not disclose, teach or suggest each and every feature of Applicants' invention as recited in independent claim 32. Accordingly, Applicants respectfully request that the rejection of claim 32 be reconsidered and withdrawn.

10. For at least the reasons stated above, independent claims 20, 25 and 32 are patentable over Engebretson. Accordingly, Applicants respectfully request that the rejections of these claims be reconsidered and withdrawn.

### ***Claim Rejections Under 35 USC § 103***

11. Claims 21, 23, 24, 26-29, 31, 33-36, and 38 are rejected as being unpatentable over Engebretson, (US 5,016,280) in view of Seligman (U.S. 6,151,400). These and the other dependent claims incorporate the subject matter of their respective independent claims and add additional subject matter which makes them independently patentable over the art of record. Accordingly, Applicants respectfully assert that the dependent claims are also allowable over the art of record.

### ***Conclusion***

12. In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

13. Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application, cancellations and amendments of

above claims, therefore, are not to be construed as an admission regarding the patentability of any claims, and Applicants reserve the right to pursue such claims in a continuation or divisional application.

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